

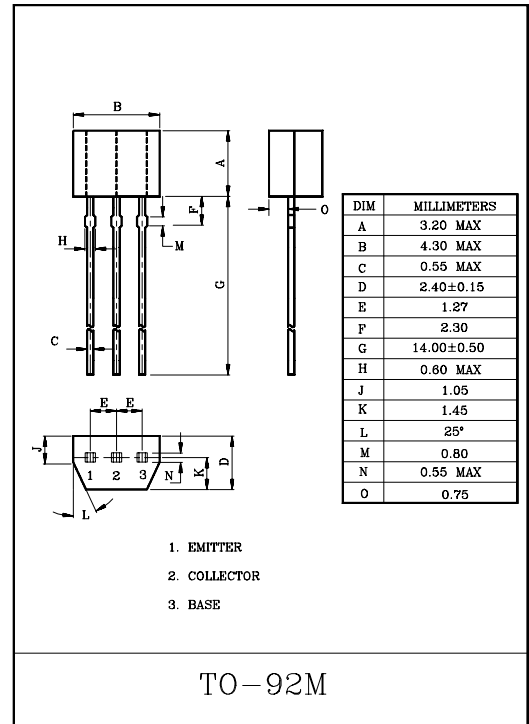
LOW NOISE AUDIO AMPLIFIER APPLICATION.

### FEATURES

- High DC Current Gain :  $h_{FE}=70\sim 700$ .
- Excellent  $h_{FE}$  Linearity  
:  $h_{FE}(0.1mA)/h_{FE}(2mA)=0.95(\text{Typ.})$ .
- Low Noise :  $NF=0.2dB(\text{Typ.})$ ,  $3dB(\text{Max.})$ .
- Complementary to KTA1267L.

### MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	50	V
Collector-Emitter Voltage	$V_{CEO}$	50	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	150	mA
Emitter Current	$I_E$	-150	mA
Collector Power Dissipation	$P_C$	400	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ\text{C}$



### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=50V, I_E=0$	-	-	0.1	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$	-	-	0.1	$\mu\text{A}$
DC Current Gain	$h_{FE}(\text{Note})$	$V_{CE}=6V, I_C=2mA$	70	-	700	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$	-	0.1	0.25	V
Transition Frequency	$f_T$	$V_{CE}=10V, I_C=1mA$	80	-	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	2.0	3.5	pF
Noise Figure	NF(1)	$V_{CE}=6V, I_C=0.1mA, f=100Hz, R_g=10k\Omega$	-	0.5	6.0	dB
	NF(2)	$V_{CE}=6V, I_C=0.1mA, f=1kHz, R_g=10k\Omega$	-	0.2	3.0	

Note :  $h_{FE}$  Classification O:70~140, Y:120~240, GR:200~400, BL:300~700